REMARKS

Claim 66 has been amended to more precisely define the subject that is administered recombinant erythropoietin. Moreover, new claims 117-130 have been added and do not constitute new matter.[1]

Figure 24 was objected to as having only one panel rather than four. Proposed corrected Figures 24A - 24D are enclosed herein to overcome the objection.

I. 35 U.S.C. §112, Second Paragraph Rejection

Reconsideration is requested of the rejection of claim 66 under 35 U.S.C 112, second paragraph as being indefinite. According to the Office, claim 66 is indefinite because it does not state "who the recombinant erythropoietin is being administered to."[2] Claim 66 has been amended to clarify that the recombinant erythropoietin is being administered to a subject. Accordingly, the basis for this rejection has been removed.

II. 35 U.S.C. 102(b) Rejections

Reconsideration is requested of the rejection of claims 66-68 and 76 under 35 U.S.C. §102(b) in view of Powell[3].

Claim 66, as amended, is directed toward a method for treating or preventing an anemic condition in a subject comprising administering to the subject a therapeutic amount of a recombinant erythropoietin produced in baby hamster kidney cells where the erythropoietin is **other than Epoetin Alfa or Beta**. The amount of recombinant erythropoietin administered to the subject is selected to **provide a therapeutic benefit within a treatment period**. Moreover, prior treatment of the subject with a therapeutic amount of Epoetin Alfa or Beta, instead of the recombinant erythropoietin produced in

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[1]Prior to this amendment, claim 66 was directed toward treatment of subjects that were "non responsive" or "adversely effected" by treatment with Epoetin Alfa or Beta. The focus of claim 66, as amended, is now directed toward the treatment of non responsive subjects, while the focus of new claim 117 is directed toward subjects that are adversely effected. Each of claims 119-130 contains all of the limitations of claims 77-85, except they depend from claim 117 as opposed to claim 66. New claim 118 is supported by Fig. 4, p. 19, paragraph 1 and 2 and p. 25, paragraph 2 and 3 of the specification.

[2]See paper 12 at page 3.

[3]Powell, U.S. Patent No. 5,688,679.

baby hamster kidney cells, **did not** provide a therapeutic benefit within a treatment period.

Powell discloses an Apa I restriction fragment of the human erythropoietin gene.[4] It is also disclosed that the gene may be expressed in high levels in stably transfected mammalian cells (e.g. monkey kidney cells or baby hamster kidney cells) to provide biologically active human erythropoietin.[5]

According to the Office, Powell anticipates claim 66 because it is said to disclose a biologically active recombinant erythropoietin produced in baby hamster cells (i.e. the Apa I restriction fragment) suitable for the treatment of patients with "deficiencies of erythropoietin, such as those with chronic renal failure [who] often suffer severe anemia."[6]

While the recombinant erythropoietin disclosed by Powell is one example of an erythropoietin suitable for use in the method of the current invention, it does not anticipate claim 66. Claim 66 also requires the recombinant erythropoietin, which is other than Epoetin Alfa or Beta, to be administered to a **class of subjects** that are non responsive to treatment with Epoetin Alfa or Beta. In particular, the claim recites that the recombinant erythropoietin administered to the subject is selected to **provide a therapeutic benefit within a treatment period** whereas treatment of the subject with a therapeutic amount of Epoetin Alfa or Beta (instead of the recombinant erythropoietin produced in baby hamster kidney cells) **did not** provide a therapeutic benefit within a treatment period. Contrary to the Office's assertion, nowhere does Powell disclose that recombinant erythropoietin produced from an Apa I restriction fragment of the human erythropoietin gene may be beneficially employed to treat anemia in a class of subjects that are non responsive[7] to either Epoetin Alfa or Beta.

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[4] *Id.* at column 1, lines 15-20.

[5] *Id.* at example 4.

[6] See paper 12 at page 4.

[7] The Office had objected to the use of the word "non responsive" in claim 66 on the grounds that it makes the claim too vague because "it can mean any effect caused by a therapeutic amount of Epoetin Alfa or Beta." Claim 66 has been amended so as to delete the word "non responsive" and replace it with the phrase "prior treatment of the subject with a therapeutic amount of Epoetin Alfa or Beta instead of the recombinant erythropoietin produced in baby hamster kidney cells did not provide a therapeutic benefit within a treatment period" so as to more particularly clarify the class of subjects to be treated by the method of claim. Per this amendment, the subjects treated by the method belong to a class of anemic subjects that did not receive a therapeutic benefit

A claim is anticipated only if each and every element as set forth in the claim is described in a single prior art reference.[8] Because Powell does not disclose every element of claim 66, it does not anticipate claim 66. Moreover, claims 67-68, and 76, which depend from claim 66, are likewise patentable over Powell for the reasons stated with respect to claim 66.

New claim 117 is also patentable over Powell. Claim 117 is directed toward a method for treating or preventing an anemic condition in a subject comprising administering to the subject a therapeutic amount of a recombinant erythropoietin produced in baby hamster kidney cells where the erythropoietin is **other than Epoetin Alfa or Beta**. The amount of recombinant erythropoietin administered to the subject is selected to **provide a therapeutic benefit within a treatment period**. Moreover, prior treatment of the subject with a therapeutic amount of Epoetin Alfa or Beta (instead of the recombinant erythropoietin produced in baby hamster kidney cells) **produced an adverse effect in the subject.** "Adverse effect" as defined in the specification means "an unwanted biological response, physical condition or biological measurement..."[9] New claim 118 further requires that the adverse effect is selected from the group consisting of hypertension, headache, arthralgia, nausea, edema, fatigue, diarrhea, vomiting, chest pain, skin rash, dizziness, thrombosis and increased blood platelets. Nowhere does Powell disclose that recombinant erythropoietin produced from an Apa I restriction fragment of the human erythropoietin gene may be beneficially employed to treat anemia in a class of subjects that are adversely effected by treatment with either Epoetin Alfa or Beta. Moreover, claims 118-130, which depend from claim 117, are likewise patentable over Powell for the reasons stated with respect to claim 117.

(e.g. increased RBC, increased HCT, increased hemoglobin, or any other benefit identified as "therapeutic" as defined on page 14 of the specification) when administered either Epoetin Alfa or Beta, but do receive a therapeutic benefit when treated with a recombinant erythropoietin suitable for use in the method of claim 66. Support for the amendment can be found in Ex. 6 and throughout the specification.

[8]Verdegaal Bros. v. Union Oil Co. of Calf., 2 USPQ 2d 1051, 1053(Fed. Cir. 1987). See MPEP § 2131.

[9]See the Specification at page 13.

III. 35 U.S.C. 103(a) Rejection

Reconsideration is requested of the rejection of claims 77-85 under 35 U.S.C. §103(a) in view of Powell and in further view of Strickland[10].

Claims 77-85, which each depend from claim 66, further recite a particular dosage, dosage regimen or mode of administration. For example, in addition to the requirements of claim 66, claim 77 requires the erythropoietin to be administered at a dose of about 5 to about 150 IU/Kg, one to three times per week.

Claims 77-85 are directed toward a method for treating or preventing an anemic condition in a subject that is a member of a class of subjects that **do not respond** when treated with Epoetin Alfa or Beta, but do respond to treatment when administered a therapeutic amount of a recombinant erythropoietin produced in baby hamster kidney cells (where the erythropoietin is other than Epoetin Alfa or Beta) within a given treatment period. Claims 119-130, which depend from claim 117, are each directed toward a method for treating or preventing an anemic condition in a subject that is a member of a class of subjects that experience an adverse effect when treated with Epoetin Alfa or Beta, but not when treated with a therapeutic amount of a recombinant erythropoietin produced in baby hamster kidney cells (where the erythropoietin is other than Epoetin Alfa or Beta) within a given treatment period.

According to the Office, it would have been obvious for a skilled artisan to modify the teaching of Powell regarding the Apa I restriction fragment of the human erythropoietin gene (i.e. the production of Epoetin Omega) with the dosages taught by Strickland to arrive at the method of claims 77-85. While Powell may disclose one example of an erythropoietin suitable for use in the method of the invention and Strickland may disclose dosages that overlap with the dosages required by claims 77-85 (and 118-130), nowhere do either Powell or Strickland alone or in combination disclose or suggest the use of a recombinant erythropoietin produced in baby hamster kidney cells (where the erythropoietin is other than Epoetin Alfa or Beta) for the treatment of an anemic condition in a subject that experiences an adverse effect or is not responsive when treated with Epoetin Alfa or Beta. A skilled artisan empowered with the collective art of record, therefore, would not have arrived at the method of claims 77-85 or new claims 118-130 without the disclosure of the Applicant's patent application.

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[10]Strickland, U.S. Patent No. 5,661,125.

The Office also asserts that Strickland discloses "that some patients experience local discomfort or stinging upon the administration of Epoetin Alfa"[11] and therefore changed the Epoetin Alfa formulation to include a local anesthetic to reduce stinging. Recognizing that Epoetin Alfa produces several adverse effects, including stinging,[12] when administered to certain subjects, new claim 117 is directed toward the administration to a subject of a recombinant erythropoietin produced in baby hamster kidney cells where the erythropoietin is **other than Epoetin Alfa** (or Beta) so as to advantageously avoid the adverse effects experienced in some subjects. Strickland would have led one skilled in the art to include an anesthetic to reduce stinging, but certainly would not have suggested that the adverse effects of Epoetin Alfa could be alleviated by instead administering a recombinant erythropoietin produced in baby hamster kidney cells.

Unable to establish a *prima facie* case of obviousness, it appears that the Office has effectively slipped into an improper "obvious to try" analysis, informed by hindsight which Applicant's disclosure affords. But the courts have consistently held that the test for a *prima facie* case of obviousness is not whether an invention is obvious to try.[13] Instead, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine the references, and there must be some reasonable expectation of success. For all the reasons detailed above, the Office has not met this legal standard.

IV. Conclusion

In light of the foregoing, Applicant requests withdrawal of the final rejection, entry of the claim amendments, withdrawal of the claim rejections, and allowance of the claims. The Examiner is invited to contact the undersigned attorney should any issues remain unresolved.

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[11]See Paper 12 at page 5.

[12]See figure 4 of the Specification for an example of some of the adverse side effects.

[13] See In re O'Farrell, 7 U.S.P.Q.2d 1673, 1680-81 (Fed. Cir. 1988).

VERSION WITH MARKINGS TO SHOW CHANGES MADE

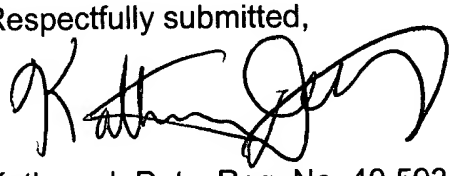
CLAIM 66:

66. (twice amended) A method for treating or preventing an anemic condition in a subject, **the method** comprising**[**,**]** administering **to the subject** a therapeutic amount of a recombinant erythropoietin produced in baby hamster kidney cells, **the recombinant erythropoietin being other than Epoetin Alfa or Beta**, wherein the amount of recombinant erythropoietin **administered** is selected to provide a therapeutic benefit within a treatment period, and wherein **[**said**]** **prior treatment of the** subject **[**is non responsive or adversely effected by treatment**]** with a therapeutic amount of Epoetin Alfa or Beta **did not provide a therapeutic benefit within a treatment period**.

Claims 117-130 are added.

The Commissioner is hereby authorized to charge any deficiency or overpayment of the required fee to Deposit Account No. 19-1345.

Respectfully submitted,



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